MR 95-2

HOMESTAKE MINE.

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In the following report which is of a primary nature no attempt is made to cover names of claims, area, historical topography or general geology data, no samples were taken for assay purposes but a fewwere broken out to show the general character of the ore, these compared well with the ore held in Valdez by Mr. Whalen.

ACCESSIBILITY.

Located on the north shore of Harriman Fjord no trouble would be ensountered in landing supplies or machinery from a scow or small bact, same can be handled by hand no horses being necessary.

SURFACE ORE

The surface showing as far as it is uncovered at this time of the year shows ore in width of 4 to 8 inches with an exposure in length of about 4C feet, samples taken show free gold in nearly all the ore.

PRESENT EXPLORATION.

The first tunnel driven is judged to be at an elevation of one hundred feet not more than one hundred and ten feet at the most and was driven on the vein about 300 feet. This drift shows ore of working value for about 40 feet, the balance is either a stringer or broken of little value to the mine unless stoping should locate other shoots of ore not exposed at present. The fact of this drift is in broken ground and from all indications this shoot does not extend on this level. 30 feet of this ore is of very good character and can be mined to advantage.

WINZE.

From the upper tunnel a winze was sunk 64 feet and ore was obtained at all times same being from 4 inches to 20 inches, samples taken from this winze in January, 1917 and a sayed for gold at the Granite Mine assay office give the following returns; \$31.82--\$19.84--\$40.19-\$12.19--\$63.42--\$10.54--41.55. Average \$32.50 which checks very close with the ore milled on the ground.

The ineer side of shaft is much the strongest and carries the best values same being closer to the contact.

LOWER TUNNEL

This tunnel is located about 50 feet firm about the present mill and has developed ore for about seventy five feet, of this distance 40 feet is stripped with 35 feet of ore being broken and laying in the tunnel. Average width of this ore is 7 inches and is of a very high grade free gold showing in nearly all of same. The fact of the drift has 8 inches of ore same being strong with no indications of being cut out, the values seem to carry up this point equally well. The balance of this ore shoot is proven by the outer side of the winze and a small cross cut near the portal of the tunnel also by the bottom of the winze which is connected with the lower tunnel. The ore at this level is much stronger and of a better grade than above in the winze.

SUMMARY OF ORK.

From work so done on the vein about 200 ton of ore has been developed that can be depended on to prove of milling value, this does not take in any ore than is above the upper drift or allow for ore below lower tunnel but includes ore than is proven by drift and winze work. A safe estimate would bring the total tonnage up to at least 350 ton which is not a large tonnage but this rock is above the average value. From the present showing the ore shoot will become somewhat longer extending each side of the contact and from past experience I would judge this pay ore to extend in depth below the present tunnel something like one hundred and twenty feet with a probable width of 100 feet.

FUTURE OPERATIONS.

The first work necessary would be the sinking of a winze and the installation of a hoist as no depth can be obtained by tunnel work.

The lower tunnel should be driven until end of ore shoot is found so that stoping operations can be carried on to advantage.

SUGGESTIONS.

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Should it be decided that this lease should be taken over a larger mill should be placed on the property with all necessary power.

A concentrator with a engine large enough to drive same, and a crusher are on the ground and will do for a five stamp mill.

A small compressor would have to be placed on the ground to insure cheap operations and to furnish air in case a pump was used in the winze workings.

One or two buildings would have to be placed on the ground and a blacksmith shop put on.

The present mill building is of small account the lumber used in same being but a few feet.

Wood and timber for all purposes can be reached easily and water obtained for at least 8 months of the year.

CONCLUSION.

The writer believes that if reasonable terms can be obtained and money raised to go shead on the plan outlined with the amount of ore in sight that good returns can be made bearing in mind at all times that it is a lease and while small very rich ore.